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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,077

08/26/2003

Benny Olesen

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WESTMAN CHAMPLIN (MICROSOFT CORPORATION)

SUITE 1400

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MINNEAPOLIS, MN 55402-3319

EXAMINER

DANNEMAN, PAUL

ART UNIT

PAPER NUMBER

3627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/648,077	Applicant(s) OLESEN, BENNY	
	Examiner PAUL DANNEMAN	Art Unit 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in response to the application filed on 26 August 2003.
2. Claims 1-24 have been examined.

Drawings

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application **because Fig.4 is a screen shot which is not discernable and there are hand drawn annotations within the figure**. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1-3, 5-15, and 18-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al., US 5,953,707, hereafter known as Huang.

7. **Examiner's note:** Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the **entire** reference as potentially teaching all or part of the claimed invention, as well as the content of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1, 8 and 18:

With regard to the limitations:

- ***Master Plan includes actual sales orders, a user interface and simulated sales orders.***
- ***Secondary Master Plan includes actual sales orders, a user interface and production scheduling and inventory control.***
- ***Intermittently Secondary Master Plan data is copied to Master Plan.***

Huang in at least Column 1, lines 61-65 discloses a Decision Support System with a user interface with a view into the supply chain that takes into account the view point of the particular user such as a plant manager or sales manager. Huang in at least Column 50, lines 12-46 discloses some aspects of the user interfaces for entering forecasts based on current or regular sales, orders, promotional activities, and the like. Huang in at least Column 2, lines 16-19 further

discloses that the present invention allows the creation of an integrated production, sales and inventory (PSI) plan and provides a projection concerning what is feasible in the production, sales and inventory plan. Huang in at least Fig.16 and Column 2, lines 20-24 still further discloses that the present invention will allow the manufacturer, or vendor to plan the supply of goods and services for a customer by integrating all information about a product, including current, past and projected future sales and inventory, into a feasible replenishment plan. Huang in at least Fig.1 and Column 4, lines 46-67 still further discloses that the Decision Support System (DSS) relies on quantitative models and data analysis routines to provide decision support. For example the production, sales and inventory (PSI) planning process employs models and routines from the library to represent the underlying supply chain abstraction and provide decision support.

Huang in at least Column 12, lines 50-67 and Column 13, lines 1-7 discloses a Demand Management process by which customers' requirements are characterized with the specification of prevailing uncertainty to develop and maintain customer sales forecasts. As the actual purchase orders arrive, the enterprise attempts to fulfill the customers' requirements to their satisfaction. Information from different sources is used to manage the demand requirements such as (Huang, Column 19, lines 62-67 and Column 20, lines 1-12) POS (point of sale data and shipment history), inventory data (relative to the inventory position of its product at the customer's stocking points), market data corresponding to various quantitative information usually provided by external entities such as Nielsen related to the sales of the type of product considered in the entire market and customer forecasts.

Huang in at least Column 13, lines 9-44 further discloses the PSI Planning process used to determine a set of feasible sales, production and inventory requirements with a continuous effort to update the existing PSI plan to accommodate changes in the requirements before and after a series of planning meetings where inputs from various sources, resolution of possible conflicts, and balancing the concern of different functions to reconcile, develop and approve a new set of feasible sales, production and inventory requirements.

Huang in at least Figs.60 and 61 and Column 107, lines 41-67 discloses a user experimenting with different Production, Inventory and Sales figures and the effects caused by the different changes to the PSI plan and the ability to create different scenarios.

Therefore, while Huang does not use the terms Master Plan it would be obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Huang provides a Decision Support System to develop a PSI Plan, where a qualified user can use current sales as well as projected sales to project how different resources will be impacted by changes in projected or future sales orders.

Claims 2-3, 9-11 and 19-21:

With regard to the limitation:

- ***Secondary Master Plan is updated daily and copied to Master Plan.***

Huang does not disclose updating the present sales from the current plan into the future plan with the projected sales on a daily basis, per se. However, Huang in at least Column 6, lines 36-67 discloses a DSS (Decision Support System) Database containing synthesized data drawn from a variety of external supply chain information sources and a Supply Chain Information Systems retrieving the required data and providing updated data, as needed. Huang in at least Column 13, lines 9-43 discloses the PSI (production, sales and inventory) Plan, its initial creation based on long-term top-down sales forecast and budget plan and the continuous effort to update the existing PSI plan to accommodate the changes in the requirements before and after a series of monthly PSI planning meetings. Therefore, it would be obvious, at the time of the invention, to one of ordinary skill to conclude that Huang updates the plan data as required.

Claims 5-7, 12-15 and 22:

With regard to the limitations:

- ***Master Plan user interface only allows simulated sales orders to be entered.***
- ***Simulated sales orders may only be entered in Master Plan.***

- *Master Plan and Secondary Master Plan operate independently except when Secondary Master Plan is updated and copied to Master Plan.*
- *Secondary master plan operates without regard to simulated sales orders.*

Huang does not specifically disclose all the user interface controls. However, Huang in at least Column 50, lines 12-46 discloses some aspects of the menu driven user interface for entering forecasts based on current or regular sales, orders, promotional activities, and the like. The user is responsible for entering forecasts for specific account/model combinations under his/her responsibility. Huang in at least Column 90, lines 53-67 further discloses that the Decision Support System is a secure system where a userid and password are required for access. Huang further discloses that a DSS System Administrator is responsible for assigning each user to a group and assigning rights to every new account which controls what DSS usage rights each user is entitled to. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Huang's secure system with an administrator which assigns access rights of varying levels to the DSS is functionally equivalent to applicant's invention.

Huang in at least Column 29, lines 30-67 discloses that in the PSI Plan the user can utilize an independent mode where the user can edit the production, sales and inventory requirements separately by disregarding any consistency requirement. Huang in at least Column 91, lines 28-67 further discloses that the data domains are independent of the data source (forecast, point of sales, shipments). Huang in at least Column 95, lines 59-67 and Column 96, lines 1-18 still further discloses that both dependent and independent demand processes are supported. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Huang allows the same independence and interdependency as the applicant's invention.

8. **Claims 4, 16-17 and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claims 1, 18 and 18 above, and further in view of Eisner, US 6,820,060 B1.

Claims 4, 16-17 and 23-24:

With regard to the limitation:

- ***Actual sales orders include simulated sales orders with a probability and threshold of being converted to actual sales orders.***

Huang does not specifically disclose the use of a probability that simulated sales orders will be converted to actual sales orders per se. However, Huang in at least Column 12, lines 37-40 discloses given the uncertainty in the medium to long-term sales forecasts, determining whether or not the enterprise should expand, maintain or reduce its production capacity and / or stocks for the critical components. Huang in at least Column 20, lines 50-55 further discloses the use of bottom-up demand forecasting to develop a customer specific sales forecast based on historical shipment to the customer, POS information at the customer location, and the customer's own forecast regarding its future orders.

Eisner in at least Figs. 2, 6 and 7, Column 1, lines 60-67 and Column 2, lines 1-19 discloses a sales probability generator. The sales probability generator utilizes sales information, to determine the account control level that corresponds to a particular stage of a sales cycle. This then used to determine a sales probability and quantify the likelihood of success for each sales account. Huang and Eisner have each disclosed elements which are old and well known in the arts. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine Huang's Decision Support System with Eisner's Sales Probability Forecasting system.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Huang; Ying et al., US 6,151,582 A teaches modeling processes for analyzing the supply chain.

- Phelan et al., US 2004/0093296 A1 teaches a marketing optimization system.
- Wei, US 6,889,106 B2 teaches a Master Production Scheduling management system.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

1 March 2008

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627